Claims

What is claimed is:

1. An interface enhancing apparatus, comprising:

a first component configured to be mechanically and electrically coupled with an interface panel of a modular platform board; and

a second component coupled to the first component, the second component being substantially parallel with the interface panel when the first component is mated with the interface panel, and having one or more enhanced interfaces configured for electrical communication with the modular platform board.

2. The interface enhancing apparatus of Claim 1, wherein the first component includes a carrier substrate configured to electrically interconnect the second component with the modular platform board.

3. The interface enhancing apparatus of Claim 2, wherein the carrier substrate is one of a printed circuit board, flex circuit, discrete metal wires, fiberoptic cables, and unwired connections.

4. The interface enhancing apparatus of Claim 1, wherein the second component includes a carrier substrate configured to electrically interconnect the first component.

5. The interface enhancing apparatus of Claim 4, wherein the carrier substrate is one of a printed circuit board, flex circuit, discrete metal wires, fiberoptic cables, and unwired connections.

6. The interface enhancing apparatus of Claim 1, wherein the second component has a first side opposably facing the interface panel and an opposite second side.

7. The interface enhancing apparatus of Claim 6, wherein the one or more enhanced interfaces include one or more I/O interfaces.

8. The interface enhancing apparatus of Claim 7, wherein the one or more I/O interfaces are selected from a group of connectors including IEEE 1394, Ethernet, USB, Serial, cable, and fiberoptic.

9. The interface enhancing apparatus of Claim 7, wherein the one or more interfaces are positioned on the first side.

10. The interface enhancing apparatus of Claim 7, wherein the one or more interfaces are positioned on the second side.

11. The interface enhancing apparatus of Claim 1, wherein the modular platform board is at least part compliant with a standard and an aggregate protrusion distance from the interface panel is within a dimension requirement of the standard.

12. The interface enhancing apparatus of Claim 11, wherein the standard is PICMG 3.0 ATCA, and the dimension requirement is 95 mm.

13. The interface enhancing apparatus of Claim 12, wherein the aggregate protrusion distance of the first component, second component, and the one or more enhanced interfaces is less than or equal to 95 mm.

14. The interface enhancing apparatus of Claim 1, wherein the first component is removably coupled to the modular platform board through an expansion slot in the interface panel.

15. The interface enhancing apparatus of Claim 14, wherein the expansion slot is a mezzanine card module.

16. The interface enhancing apparatus of Claim 1, further comprising a support bracket removably coupled between the second component and the interface panel to provide additional support for the second component.

17. The interface enhancing apparatus of Claim 1, wherein the first component and the second component are a single unit having a single carrier substrate.

18. A system, comprising:

a modular platform board having an interface panel; and

an interface enhancing apparatus attached to the interface panel, the interface enhancing apparatus including

a first component mechanically and electrically coupled to the interface panel of the modular platform board, and

a second component coupled to the first component, the second component being substantially parallel with the interface panel and having one or more enhanced interfaces configured for electrical communication with the modular platform board.

19. The system of Claim 18, wherein the first component includes a carrier substrate configured to electrically interconnect the second component with the modular platform board.

20. The system of Claim 19, wherein carrier substrate is one of a printed circuit board, flex circuit, discrete metal wires, fiberoptic cables, and unwired connections.

21. The system of Claim 18, wherein the second component includes a carrier substrate configured to electrically interconnect the first component.

22. The system of Claim 21, wherein the carrier substrate is one printed circuit board, flex circuit, discrete metal wires, fiberoptic cables, and unwired connections.

23. The system of Claim 18, wherein the second component has a first side opposably facing the interface panel and an opposite second side.

24. The system of Claim 23, wherein the one or more enhanced interfaces include one or more I/O interfaces.

25. The system of Claim 24, wherein the one or more I/O interfaces are selected from a group of connectors including including IEEE 1394, Ethernet, USB, Serial, cable, and fiberoptic.

26. The system of Claim 23, wherein the one or more interfaces are positioned on the first side.

27. The system of Claim 23, wherein the one or more interfaces are positioned on the second side.

28. The system of Claim 18, wherein the modular platform board is at least part compliant with a standard and an aggregate protrusion distance from the interface panel is within a dimension requirement of the standard.

29. The system of Claim 28, wherein the standard is PICMG 3.0 ATCA, and the dimension requirement is 95 mm.

30. The system of Claim 29, wherein the aggregate protrusion distance of the first component, second component, and the one or more enhanced interfaces are less than or equal to 95 mm.

31. The system of Claim 18, wherein the first component is removably coupled to the modular platform board through an expansion slot in the interface panel.

32. The interface enhancing apparatus of Claim 31, wherein the expansion slot is a mezzanine card module.

33. The system of Claim 18, further comprising a support bracket removably coupled between the second component and the interface panel to provide additional support for the second component.

34. The interface enhancing apparatus of Claim 18, wherein the first component and the second component are a single unit having a single carrier substrate.